

TABLE 60

Foreign total employment, R&D employment, and level of education of researchers, by activity, industry, and company size: 2019

(Thousands)

Industry and company size	NAICS code	Total employment		Total R&D employment		Researchers ^a		R&D technicians and equivalent staff	Other R&D supporting staff	
						Total	With PhD			
All industries	21–23, 31–33, 42–81	11,083		844		584	36	188	72	
Manufacturing industries	31–33	7,429		447		351	25	60	36	
Food	311	573		12		9	*	2	1	i
Beverage and tobacco products	312	458		3		2	1	1	*	
Textile, apparel, and leather products	313–16	181		1		1	*	1	*	
Wood products	321	11		*		*	*	*	*	
Paper	322	114		2		2	*	*	*	
Printing and related support activities	323	43	i	*	i	*	0	*	*	i
Petroleum and coal products	324	64		3		1	*	2	*	
Chemicals	325	988		70		46	7	11	12	
Basic chemicals	3251	115		6		3	1	3	*	
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	74		4		2	*	1	*	
Pesticide, fertilizer, and other agricultural chemicals	3253	31		2		1	*	1	1	
Pharmaceuticals and medicines	3254	421		45		31	5	4	10	
Soap, cleaning compound, and toilet preparation	3256	214		6		5	1	*	*	
Paint, coating, adhesive, and other chemicals	3255, 3259	134		7		5	*	1	*	
Plastics and rubber products	326	199		6		3	i	3	1	
Nonmetallic mineral products	327	67	i	1	i	*	i	*	i	*
Primary metals	331	83		1		*	i	*	*	i
Fabricated metal products	332	171		2		2	*	*	*	
Machinery	333	729		43		36	1	4	3	
Agricultural implement	33311	80		9		7	i	1	*	
Semiconductor machinery	333242	59		8		7	*	1	*	
Engine, turbine, and power transmission equipment	3336	112		5		5	*	*	*	
Other machinery	other 333	478		22		17	i	2	i	2
Computer and electronic products	334	1,358		182		153	8	17	i	12
Communications equipment	3342	114		32		27	i	2	3	
Semiconductor and other electronic components	3344	581		85		78	5	6	2	i
Navigational, measuring, electromedical, and control instruments	3345	384		35	i	27	i	5	i	3
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	85		8	i	5	i	2	i	1
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument	334511	102		7	i	6	i	1	1	i
Other measuring and controlling device	other 3345	196		20		16	2	2	i	1
Other computer and electronic products	other 334	279		30		22	1	4	i	4
Electrical equipment, appliances, and components	335	458		23	i	19	i	3	1	
Transportation equipment	336	1,280		72		60	3	8	4	
Motor vehicles, bodies, trailers, and parts	3361–63	1,080		61		50	2	7	4	
Aerospace products and parts	3364	130		8		7	*	1	*	
Aircraft, aircraft engine, and aircraft parts	336411–13	130		8		7	*	1	*	
Guided missile, space vehicle, and related parts	336414–15, 336419	*		*		*	0	0	0	

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Industry and company size	NAICS code	Total employment	Total R&D employment	Researchers ^a		R&D technicians and equivalent staff	Other R&D supporting staff
				Total	With PhD		
10–19 ^b	–	4	2	1	*	*	i
20–49	–	69	9	5	1	3	1
Medium companies							
50–99	–	67	10	6	1	3	1
100–249	–	256	23	17	1	4	2
Large companies							
250–499	–	231	25	20	1 i	4	1
500–999	–	343	34	18	1	13	3
1,000–4,999	–	1,721	149	112	6	26	11
5,000–9,999	–	1,294	97	69	5 i	18 i	11
10,000–24,999	–	2,764	198 i	116	8 i	67 i	15 i
25,000 or more	–	4,334	298	221	12	49	28

* = amount < 500 employees; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

^a Researchers include R&D scientists and engineers and their managers.

^b The Business Enterprise Research and Development Survey does not include companies with fewer than 10 domestic employees.

Note(s):

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates with estimates published for years prior to 2018. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2019.